

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Appl. No. : 10/084,856  
Applicant : Douglas U. Mennie et al.  
Filed : February 27, 2002  
Title : Automatic Funds Processing System  
TC/A.U. : 3694  
Examiner : Jamie H. Swartz

Docket No. : 247171-000373USD1

**TRANSMITTAL OF APPEAL BRIEF**

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

Submitted herewith is Appellants' Appeal Brief in support of the Notice of Appeal filed May 15, 2008. The Commissioner is authorized to charge Nixon Peabody LLP Deposit Account No. 50-4181 (Attorney Docket No. 247171-000373USD1) the \$510.00 fee associated with filing of the brief for the Notice of Appeal in accord with 37 C.F.R. § 41.20(b)(2), a \$120.00 fee for a one-month extension of time and any shortage in fees due in connection with the filing of this paper. Please credit any additional fees to such deposit account.

Date: August 19, 2008

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**Customer No. 41230**

**PATENT**

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Filed : February 27, 2002  
Title : Automatic Funds Processing System  
TC/A.U. : 3694  
Examiner : Jamie H. Swartz  
Docket No. : 247171-000373USD1  
  
Customer No. : 41230

**APPEAL BRIEF PURSUANT TO 37 C.F.R. § 41.37**

**IN RESPONSE TO NOTICE OF PANEL DECISION FROM PRE-APPEAL BRIEF  
REVIEW MAILED JUNE 19, 2008**

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Commissioner:

This Appeal Brief is filed in response to the notice of panel decision from pre-appeal brief review mailed June 19, 2008, further to the notice of appeal filed by Appellant on May 15, 2008, which was responsive to the Final Office Action mailed December 31, 2007 and Advisory Action mailed May 9, 2008. A Petition for a one-month extension of time is hereby made to extend the time to respond to the June 19, 2008, notice of panel decision by one month to August 19, 2008.

**1. REAL PARTY IN INTEREST**

The real party in interest is Cummins-Allison Corporation having a place of business at 891 Feehanville Drive, Mt. Prospect, IL 60056.

**2. RELATED APPEALS AND INTERFERENCES**

There are no related appeals and interferences.

**3. STATUS OF CLAIMS**

Claims 258-261 and 267-270 have been finally rejected. It is from the Final Office Action of claims 258-261 and 267-270 and Advisory Action mailed May 9, 2008, that this appeal is taken.

Claims 258-261 and 267-270 stand finally rejected under 35 U.S.C. § 112, 1<sup>st</sup> paragraph, as failing to comply with the written description requirement.

Claims 258-261 and 267-270 stand finally rejected under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph, as being indefinite.

Claims 258-261 and 267-270 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith et al. (US 5,641,050) (“Smith”) in view of Avnet *et al.* US 5,291,003 (“Avnet”).

As stated on the continuation sheet (PTO-303) of the Advisory Action mailed May 9, 2008, “[t]he examiner still upholds the 35 USC 112, 1<sup>st</sup> paragraph rejection of claims 258-261 and 267-270,” “still upholds the 35 USC 112, 2<sup>st</sup> paragraph rejection of claims 258-261 and 267-270,” and “upholds the 35 USC 103 rejection of claims 258-261 and 267-270 as being unpatentable over Smith (5641050) in view of Avnet (5291003).”

#### **4. STATUS OF AMENDMENTS**

A Final Office Action was mailed on December 31, 2007. A Response to the Final Office Action was filed April 30, 2008. The April 30, 2008 Response to the Final Office Action did not request amendment to the claims.

#### **5. SUMMARY OF CLAIMED SUBJECT MATTER**

Pursuant to 37 C.F.R. § 41.37 (c)(1)(v) exemplary references to the specification by page and line number and to the drawings and reference characters are including in the below summary of the independent claims. Such references are by way of example only and are not to be construed in a limiting manner.

Aspects of the invention, such as recited in independent claim 258, recite a method of redeeming currency from a customer at a self-service machine (see, e.g., FIGS. 1a-1b, 56a-56f; page 1, lines 7-8; page 87, lines 10-17; page 110, line 18 to page 131, line 32). This method includes an act of receiving money input by the customer (see, e.g., FIG. 56f; page 113, lines 25-26), the act of receiving money input by the customer comprising substantially simultaneously receiving, in a bulk coin receptacle, randomly oriented bulk coins input by the customer (see, e.g., FIG. 56f, FIG. 58; page 113, lines 25-26; page 118, lines 23-26). The method further includes the act of singulating the bulk coins using a coin separation device (see, e.g., FIGS. 58-69; page 113, lines 25-28; page 118, line 8 to page 123, line 31). The method further includes the act of discriminating between authentic and non-authentic forms of the money including discriminating between valid coins and invalid coins of the bulk coins (see, e.g., FIGS. 62-65; page 125, line 25 to page 131, line 32). The method further includes the act of determining a total value of the authentic forms of the money input by the customer (see, e.g., FIG. 56f, FIG. 58; page 113, line 25 to page 116, line 14). The method further includes the act of dispensing a

card having a storage medium for storing a monetary value that is related to the total value (see, e.g., page 11, line 28 to page 12, line 12; page 18, lines 14-17; page 22, line 30 to page 23, line 2; page 110, lines 18-31; page 114, lines 28-31; page 115, lines 7-9; FIGS. 56b-56d).

Aspects of the invention, such as recited in independent claim 268, recite a method of redeeming currency from a customer at a self-service machine (see, e.g., FIGS. 1a-1b, 56a-56f; page 1, lines 7-8; page 87, lines 10-17; page 110, line 18 to page 131, line 32). This method includes an act of receiving bulk coins input by the customer, the act of receiving bulk coins comprising substantially simultaneously receiving, in a bulk coin receptacle, randomly oriented bulk coins input by the customer (see, e.g., FIG. 56f, FIG. 58; page 113, lines 25-26; page 118, lines 23-26). This method also includes an act of singulating the bulk coins using a coin separation device (see, e.g., FIGS. 58-69; page 113, lines 25-28; page 118, line 8 to page 123, line 31). This method also includes an act of discriminating between authentic and non-authentic coins (see, e.g., FIGS. 62-65; page 125, line 25 to page 131, line 32). The method also includes an act of determining a total value of the authentic coins (see, e.g., FIG. 56f, FIG. 58; page 113, line 25 to page 116, line 14). The method further includes an act of dispensing a card having a storage medium associated with a monetary value related to the total value of the authentic coins (see, e.g., page 11, line 28 to page 12, line 12; page 18, lines 14-17; page 22, line 30 to page 23, line 2; page 110, lines 18-31; page 114, lines 28-31; page 115, lines 7-9; FIGS. 56b-56d).

## **6. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

- I.** Whether claims 258-261 and 267-270 fail to comply with the written description requirement under 35 U.S.C. § 112, 1<sup>st</sup> paragraph.
- II.** Whether claims 258-261 and 267-270 are indefinite under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph.

**III.** Whether claims 258-261 and 267-270 are unpatentable over Smith et al. (US 5,641,050)(“Smith”) in view of Avnet *et al.* US 5,291,003 (“Avnet”) under 35 U.S.C. § 103(a).

**7. ARGUMENT**

**I. CLAIMS 258-261 AND 267-270 COMPLY WITH THE WRITTEN DESCRIPTION REQUIREMENT OF 35 U.S.C. § 112, 1<sup>ST</sup> PARAGRAPH**

Appellant respectfully submits that claims 258-261 and 267-270 comply with the written description requirement of 35 U.S.C. § 112, 1<sup>st</sup> paragraph.

The written description requirement of § 112 requires the application to “convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention.” *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991); *see also In re Wright*, 866 F.2d 422, 424, 9 USPQ2d 1649, 1651 (Fed. Cir. 1989); *In re Kaslow*, 707 F.2d 1366, 217 USPQ 1089 (Fed. Cir. 1983). However, the claimed subject matter need not be described “*in haec verba*” in the original specification in order to satisfy the written description requirement. *In re Wright*, 866 F.2d at 425, 9 USPQ2d at 1651. Rather, “the test . . . is whether a person of ordinary skill in the art would recognize that the applicant possessed what is claimed in the later filed application as of the filing date of the earlier filed application.” *Noelle v. Lederman*, 355 F.3d 1343, 1348, 69 USPQ2d 1508, 1513 (Fed. Cir. 2004).

In the instant case, the Examiner stated that the appellant “includes details about a bulk coin receptacle as well as the acceptance of bulk coins” and alleged that “[t]hese details are not disclosed in the original specification or the original claims”. The Examiner noted that “[t]here are details of mixed loose coins that are added but there is nothing in the original disclosure that

shows or teaches that the coins aren't added one at a time (§ 397)" (see page 3, numbered paragraph 5 of Final Office Action). The Examiner alleged that the claims "contains subject matter which was not reasonably described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention." *Id.*

Paragraph [0397] of Appellant's specification, cited by the Examiner, states that "[a] coin transaction is described in greater detail in FIG. 56f" wherein, "[a]s shown, a customer loads mixed coins into the system at step 12a" and "[t]he coins are sorted, authenticated, and bagged one at a time." (see page 113, lines 25-31).

Appellants specification further states that "the system may include a coin sorting and discrimination module 19" and that "FIGS. 58-61 illustrate a disc-type coin sorter used in coin sorting and discrimination module 19 that uses a coin-driving member having a resilient surface for moving coins along a metal coin-guiding surface of a stationary coin-guiding member." (see page 118, lines 8-31).

Appellant's specification discloses that "the coin-driving member is a rotating disc, and the coin-guiding member is a stationary sorting head" and that "[a]s can be seen in FIG. 58, a ***hopper*** 1510 receives coins of mixed denominations and feeds them through central openings in a housing 1511 and a coin-guiding member in the form of an annular sorting head or guide plate 1512 inside or underneath the housing" wherein, "[a]s the coins pass through these openings, they are deposited on the top surface of a coin-driving member in the form of a rotatable disc 1513." (see page 118, lines 23-28)(emphasis added).

Appellants note that the term "hopper" is a general usage term used in many fields (*see, e.g.,* The AMERICAN HERITAGE DICTIONARY, SECOND COLLEGE EDITION, defines "hopper" as,



*inter alia*, “. . . 2.b. Any of various other receptacles in which something is held in readiness prior to usage or consideration”).

Moreover, Appellants use the term “hopper” elsewhere in the specification (see, e.g., page 40, lines 23-25, “[a] stack of documents (not shown) may be deposited in a ***hopper*** 218 which holds the documents securely and allows the documents in the stack to be conveyed one at a time through the counterfeit detector 210”; page 42, lines 25-28, “[t]o summarize the operation of the unit, a stack of documents, for example, bills or checks, is fed by the transport mechanism (element 18 in FIG. 1a) into the ***hopper*** 218” and “[e]ach document is transported adjacent to the optical sensor 220, which generates image data corresponding to one side of the document”; page 99, lines 26-27, “no call bills may be reconciled either on-the-fly or after the completion of processing all the bills placed in the input ***hopper*** . . . .”; page 100, lines 4-5, “For example, assume a stack of fifty bills is placed in the input ***hopper*** and processed . . . .”)(emphasis added). In each of the above examples in Appellants specification, the term “hopper” is used to describe the receipt of a plurality of objects at the same time.

Appellant’s specification likewise discloses a coin transaction in which “a customer *loads* mixed coins into the system at step 12a” (emphasis added) whereupon the coins are “sorted,” as disclosed (see page 118, lines 8-31). “Loads” again conventionally would be interpreted, in context with the disclosure, as describing the simultaneous inputting of an appreciable number of coins (*see, e.g.,* The AMERICAN HERITAGE DICTIONARY, SECOND COLLEGE EDITION, which defines “load” as, for example, “To provide or fill nearly to overflowing”).

The specification discloses in great detail, in Appellant’s specification from page 118, line 8 to page 131, line 32, how the input coins are sorted and/or discriminated (see, e.g., page 131, lines 1-7) and counted. The entire structure of the disclosed machine is clearly configured

for rapid sorting of bulk coins, as would be instantly recognized by one of ordinary skill in the art at the time of the invention. Such person of ordinary skill in the art at the time of the invention would note particularly the use of a hopper 1510 (see page 118, lines 8-31; FIG. 58) to hold and convey bulk coins for processing, the use of a motor 1514 driven disc 1513 (see page 118, lines 23-31; FIG. 58) to impart a sufficient rotational velocity so that “the coins 1525 deposited on the top surface thereof tend to slide outwardly over the surface of the pad due to centrifugal force” (see, e.g., page 119, lines 12-24), the disclosure that the sorting operation is “*high speed*” (see, e.g., page 119, line 25 to page 120, line 3)(emphasis added), the disclosure that the sorting head 1512 includes “various channels and other means especially designed for *high-speed sorting* with positive control of the coins” (see, e.g., page 120, lines 4-15)(emphasis added). It is further noted that FIG. 59 shows 38 coins being simultaneously guided at high-speed by the sorting head 1512. FIGS. 66, 68 and 69 show a plurality of spaced coins being ejected at high speed through a curved exit chute 1800 (see also page 131, lines 8-31). Note that the trajectory of the coins ejected into the curved exit chute 1800 is shown as being altered not by gravity, but rather by the curvature of the exit chute, yet another indication of the rate of processing to one of ordinary skill in the art.

In view of at least the above, Appellant respectfully submits that the specification conveys with *reasonable* clarity to a person of ordinary skill in the art that, as of the filing date sought, Appellants were in possession of the presently claimed invention. In the 35 U.S.C. § 112, first paragraph written description inquiry, as with obviousness, “[a] person of ordinary skill is . . . a person of ordinary creativity, not an automaton.” *Allvoice Computing PLC v. Nuance Communications, Inc.*, 504 F.3d 1236, 1242, 8 USPQ2d 1886 (Fed. Cir. 2007)(citing *KSR Int’l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742, 82 USPQ2d 1385, 1397 (2007)). Accordingly,

Appellant submits that a person of ordinary skill in the art, reviewing Appellant's written description, would readily conclude that, as of the filing date sought, Appellants were in possession of the presently claimed invention for at least the above reasons.

Still further, Appellants further submit that assignee's own U.S. Pat. No. 4,543,969, incorporated by reference in its entirety in Appellant's instant application on page 118, lines 16-17, provides an illustration of a coin "hopper". Appellant is not, at the present time, attempting to bodily incorporate the disclosure of U.S. Pat. No. 4,543,969 into the present specification. Instead, Appellant is merely pointing out that such disclosure was well known in the art at the time of the invention and respectfully submits that the written description preferably omits that which is well known in the art. *See, e.g., Hybritech Incorporated v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986) ("a patent need not teach, and preferably omits, what is well known in the art"); *Capon v. Eshhar*, 418 F.3d 1349, 1357, 76 USPQ2d 1078, 1085 (Fed. Cir. 2005). U.S. Pat. No. 4,543,969, which is assigned to the present assignee, discloses, for example, that "[s]ome businesses, particularly banks, are often faced with a large amount of coin currency . . . which must be organized, counted and recorded" and that "[t]o make counting of coins less laborious, machines have been developed which automatically sort by denomination a mixed group of coins" (col. 1, lines 14-23)(see Fig. 1). In U.S. Pat. No. 4,543,969, "[a] collection of mixed denomination coins are dropped onto the surface of the rotating disk through a central opening in the stationary disk whereby the rotating disk imparts a rotational movement to the coins" (col. 1, lines 59-63) and that "[t]o start the sorting process a collection of mixed denomination coins 11 is dropped onto a staging platform 13 which is an integral part of a housing cover 15." (see FIGS. 1-2; col. 3, lines 50-53). Specifically, U.S. Pat. No. 4,543,969 also discloses that "[t]he coins 11 are manually pushed along the gentle sloping

incline of the staging platform 13 and fall into a *hopper* 17 as indicated by the arrows in FIG. 1” whereupon “[t]he coins are directed by the *hopper* 17 into the coin sorter apparatus which is comprised of a rotating disk 19 and a stationary disk 21, shown in cross-section in FIG. 1” (*see, e.g., col. 3, lines 45-62*)(emphasis added). One of ordinary skill in the art would consider the teaching of U.S. Pat. No. 4,543,969 in assessing whether or the application, as filed, reasonably conveyed that Appellants were in possession of the subject matter now recited in the claims.

Further, page 118 of Appellant’s specification (see lines 8-31) incorporates by reference, coin sorters including, but not limited to, rail sorters (disclosed in U.S. Pat. Nos. 5,163,868 and 5,114,381, each incorporated by reference in its entirety), a core sorter (disclosed in U.S. Pat. No. 2,835,260, incorporated by reference in its entirety), a sifter-type sorter (disclosed in U.S. Pat. No. 4,360,034, incorporated by reference in its entirety), or coin-counting disks (described in U.S. Pat. No. 4,543,969, incorporated by reference in its entirety), a drum sorter, or a dual-disc sorter, as well as the sorters described, for example, in U.S. Pat. Nos. 2,750,949 and 5,299,977, each of which was incorporated by reference in its entirety. The above-noted sorters are designed to substantially simultaneously receive, in a bulk coin receptacle, an input of randomly oriented bulk coins.

Yet further, one of ordinary skill in the art would be well aware of published information, including Appellant’s own published literature, such as, but not limited to, those submitted in the Information Disclosure Statement filed on August 3, 2006, item “C2,” which were considered by the Examiner on July 20, 2007, including Cummins JetSort® High Speed Coin Sorter/Counter Model 1701 – Product Information Manual (1987) 6 pages.” This Product Information Manual discloses, *inter alia*, that the C-A JetSort 1701 processes “6,000 coins per minute,” shows on page 5 a picture a sorting head and hopper similar to that depicted in the present application, and

shows, in numerous places, a coin tray full of coins). A copy is attached as **Exhibit A** for this Honorable Board's convenience. This reference, which is **of record** in the present case, would have been well-known to one of ordinary skill in the art at the time of the invention and such person of ordinary skill in the art would read Appellant's written description in light of this knowledge.

For at least the above reasons, Appellant respectfully submits that the specification provides sufficient written description support to *reasonably* convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. If a skilled artisan would have understood the inventor to be in possession of the claimed invention at the time of filing, even if every nuance of the claims is not explicitly described in the specification, then the adequate description requirement is met. *See, e.g., Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563, 19 USPQ2d 1111, 1116 (Fed. Cir. 1991); *Martin v. Johnson*, 454 F.2d 746, 751, 172 USPQ 391, 395 (CCPA 1972) (stating "the description need not be in *ipsis verbis* [i.e., 'in the same words'] to be sufficient").

Appellants respectfully submit that the Examiner's rejection should be reversed for at least the above reasons.

**B. The Examiner Has Not Discharged the Burden of Proof Required of a Written Description Rejection**

The Examiner has the initial burden, after a thorough reading and evaluation of the content of the application, of presenting evidence or reasons why a person skilled in the art would not recognize that the written description of the invention provides support for the claims. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). As part of this burden, "the examiner should review the claims and the entire specification, including the specific

embodiments, figures, and sequence listings, to understand how applicant provides support for the various features of the claimed invention.” (see, e.g., MPEP § 2163.II.A.2)

Appellant respectfully submits that the Examiner’s statement of rejection is devoid of any “evidence or reasons why a person skilled in the art would not recognize that the written description of the invention provides support for the claims” and does not demonstrate that the Examiner has reviewed the entire specification, including the specific embodiments and figures to understand how appellant provides support for the various features of the claimed invention.

The inquiry into whether the description requirement is met is a question of fact that must be determined on a case-by-case basis. *See, e.g., In re Smith*, 458 F.2d 1389, 1395, 173 USPQ 679, 683 (CCPA 1972). The only reasoning presented by the Examiner is an example of *ipse dixit* reasoning, a bare assertion by the Examiner thinly disguised as a fact. *See, e.g., Ex parte Sorenson*, 3 U.S.P.Q.2d 1462, 1463 (Bd. Pat. App. & Inter 1987). Broad conclusory statements, particularly unsupported generalized assertions, standing alone, are not “evidence”. *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

Appellants respectfully submit that the Examiner’s rejection should be reversed for at least the above reason.

## **II. CLAIMS 258-261 AND 267-270 ARE NOT INDEFINITE UNDER 35 U.S.C. § 112, 2<sup>ND</sup>**

### **PARAGRAPH**

Appellant respectfully submits that claims 258-261 and 267-270 are not indefinite under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph.

The Examiner alleged that, as to claims 258 and 267, the word “singulating” renders the claims indefinite because the claims include a word “that is not defined by the applicant nor is it

a word found in an English dictionary thereby rendering the scope of the claim(s) unascertainable”. (see Final Office Action, page 3).

A search of the USPTO database (published patents) using the term “singulating” provided **1850** (one thousand, eight hundred and fifty) results. A narrower search of the combination of the term “singulating” and “coin” in the USPTO database (published patents) revealed **27** patents (see, e.g., U.S. Patent 4,210,801 relates to a fare collection system employing a “singulator plate 810” (col. 25, lines 36-37); U.S. Patent No. 4,863,037 refers to “an apparatus is provided which includes an operative combination of processing stations including an input station for receiving incoming mail in bulk fashion and for separating (singulating) the pieces of mail for individual delivery to the remainder of the apparatus” (col. 3, lines 8-13); U.S. Patent No. 5,612,513, stating “[f]ollowing the encapsulation step, the electrical circuits can be singulated into separate encapsulated circuits.” (Abstract)). Obviously, despite the Examiner’s assertions, this term is not unknown to the English language, nor is the usage of this term by Appellant repugnant to such usage (See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947))(The Applicant is entitled to be his own lexicographer).

The term singulation is not only used in Appellant’s art, but in many other arts to generally refer to the orderly processing of objects or information one at a time (e.g., singulation of a wafer to create individual semiconductor packages; singulation of RFID signals; singulation of statistical data; singulation of coins; singulation of documents, singulation of processed articles, etc.). As disclosed by Appellants, means are provided, for example, to reference the coins to obtain “***a single-file stream of coins*** directed against the outer wall 1562” and means to “align the outermost edge of the coins with a gauging wall 1577” (see page 119, line 25 to page 120, line 3)(emphasis added). Elsewhere, Appellant’s specification states that “[i]f desired, the

coin sorting and discrimination module 19 may be replaced with a coin discriminating module which does not sort the coins or a coin sorting module only” and that “[s]uch modules *would align the coins of all denominations in a single file* and guide them past a single coin discrimination sensor to determine whether the coins are genuine.” (page 131, lines 1-7)(emphasis added). The singulation of the coins is described in Appellant’s disclosure between page 119, line 25 and page 123, line 17. Appellants likewise disclose, in other aspects of the disclosed concepts, the singulation of documents, stating, for example, that “[a] stack of documents (not shown) may be deposited in a hopper 218 which holds the documents securely and allows the documents in the stack to be conveyed one at a time” (page 40, lines 23-25).

Appellants respectfully submit that definiteness of claim language must be analyzed in light of the content of (1) the application disclosure, (2) the teachings of the prior art, and (3) the claim interpretation that would be given by one of ordinary skill in the art at the time the invention was made. *See, e.g., In re Moore*, 439 F.2d 1232, 1235; 169 USPQ 236, 238 (CCPA 1971). The essential inquiry is whether the claims set out and circumscribe a particular subject matter with a *reasonable* degree of clarity. Whether more suitable language or modes of expression are available is not the requisite test.

Appellants respectfully submit to this Honorable Board that each of (1) the application disclosure, (2) the teachings of the prior art, and (3) the claim interpretation that would be given by one of ordinary skill in the art at the time the invention was made support a finding that the claims are definite under 35 U.S.C. § 112, second paragraph. A claim term that is not used or defined in the specification is not indefinite if the meaning of the claim term is discernible. *Bancorp Services, L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1372, 69 USPQ2d 1996, 1999-2000 (Fed. Cir. 2004) (holding that the disputed claim term “surrender value protected



investment credits” which was not defined or used in the specification was discernible and hence not indefinite because “the components of the term have well recognized meanings, which allow the reader to infer the meaning of the entire phrase with reasonable confidence”). As noted above, the term singulation is a conventional term, even though it might not be included in the particular general purpose dictionary to which the Examiner referred.

Appellants respectfully submit that the Examiner’s rejection should be reversed.

**III. CLAIMS 258-261 AND 267-270 ARE NOT UNPATENTABLE UNDER 35 U.S.C. § 103  
IN VIEW OF SMITH AND AVNET**

Appellant respectfully submits that claims 258-261 and 267-270 are not unpatentable under 35 U.S.C. § 103(a) over Smith et al. (US 5,641,050)(“Smith”) in view of Avnet *et al.* US 5,291,003 (“Avnet”).

Smith is alleged to disclose redeeming currency from a customer at a self-service machine (col. 5, line 30 – col. 17, line 3). Smith is alleged to disclose “receiving money input by the customer the act of receiving money input by the customer comprising substantially simultaneously receiving, in a coin receptacle, randomly oriented coins input by the customer (col. 7, lines 43-67, col. 10, lines 20-45)” and “a coin separation device (col. 5, line 30 – col. 10, line 55)” (*see* Final Office Action, page 5). The Examiner further alleges that “[t]he coin separation device is incorporated by Smith’s reference to the MC5 coin changer manual” and that “Smith teaches discriminating between authentic and non-authentic forms of the money including discriminating between valid coins and invalid coins of the bulk coins (col. 7, lines 43-67, col. 10, lines 20-45)” (*see* Final Office Action, page 4).

The Examiner continues on to allege that “Smith teaches determining a total value of the authentic forms of the money input by the customer (at least col. 7, lines 43-67, col. 10, lines 20-

45)” and that “Smith teaches dispensing various items, including technological devices, and never limits what the machine can dispense (abstract, col. 6, lines 42-col. 20, line 13)” (*see* Final Office Action, page 4)

The Examiner acknowledges that Smith “does not specifically state that a card can be dispensed by the invention.” However, the Examiner takes that position that, “since Smith *does not teach away it is possible that Smith could dispense a card.*” (*see* Final Office Action, sentence bridging pages 4-5)(emphasis added). To make up for this deficiency, the Examiner cites Avnet as allegedly disclosing “dispensing a card having a storage medium for storing a monetary value that is related to the total inputted value (col. 1, line 60 – col. 5, line 40)” (*see* Final Office Action, page 5).

The Examiner concludes and alleges “[i]t would therefore be obvious to one of ordinary skill in the art at the time of invention to modify Smith to include the details of dispensing a card,” stating that “[b]oth Avnet and Smith teach vending machines” and that “since Smith teaches that there are multiple items that can be dispensed by the machine it would have been obvious for Smith to dispense a value card” (*see* Final Office Action, page 5). The Examiner further states that “[t]he purpose in combining the two references is to teach that vending machines that dispensed cards with values did exist at the time of the invention, and to show Smith *could have* dispensed cards with values” (*see* Final Office Action, page 5)(emphasis added).

Smith also fails to disclose or suggest dispensing items “including technological devices,” as alleged. The Examiner has not shown that Smith even discloses a single example of such a technological device. Instead, the Examiner casts the inquiry in the negative and attempts to show not what Smith teaches, but what it teaches by the virtue of not explicitly inclusion (i.e.,

the Examiner is alleging that Smith “never limits what the machine can dispense”). By the Examiner’s logic, every reference could be cited not for what it discloses and suggests, but for what it does not expressly exclude. Appellant respectfully submits that this position does not comport with the case law concerning 35 U.S.C. § 103 and, contrary to the Examiner’s unsupported conclusion, Smith does not constitute a domain of infinite scope.

Appellant respectfully submits that the Examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability. *See, e.g., In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The legal concept of *prima facie* obviousness is a procedural tool of patent examination, allocating the burdens of going forward with production of evidence in each step of the examination process (*citations omitted*)(*see, e.g.,* MPEP § 2142). *See also Ex parte Smith*, 83 USPQ2d 1509, 1515 (Bd. Pat. App. & Int. 2007)(*citing In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)) (“[R]jections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”).

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). Appellant respectfully submits that the Examiner has failed to discharge this burden and that the burden has not shifted to the Appellants to present argument and/or evidence to overcome the Examiner’s deficient showing. Appellants submit that the Examiner’s burden to set forth a *prima facie* case of obviousness has not been discharged by the Examiner’s broad conclusory statements which, standing alone, are not

“evidence” supportive of a *prima facie* showing. *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

It is further noted that the Examiner’s citation of Smith including the “(abstract, col. 6, lines 42 – col. 20, line 13)” is less than helpful in setting forth the factual predicate upon which the rejection is premised. The Examiner has failed to, as required, point to “page and line” of a reference wherein each feature of a claimed invention is asserted to reside (*see, e.g., In re Rijckaert*, 9 F.3d 1531 (Fed. Cir. 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452 (Fed. Cir. 1984)) and appears not to reflect an earnest attempt at “factfinding.”

Further, Appellants note that Smith does not disclose or suggest, as alleged, “a coin separation device (col. 5, line 30 – col. 10, line 55)” (*see* Final Office Action, page 5). The customer of the vending machine himself or herself separates the coins and places them, one at a time, in slot 35. The vending machine itself performs no “separation” of coins or sorting, nor has the MC5 line of coin changers been shown, explicitly or inherently, to disclose or suggest separation of coins, as alleged (e.g., as opposed to, for example, simply validating and summing the coins individually placed into the slot). Additionally, Appellants note that both Smith and Avnet similarly fail to disclose or suggest an “act of receiving money input by said customer comprising substantially simultaneously receiving, in a bulk coin receptacle, randomly oriented bulk coins input by said customer” (claim 258). Avnet discloses on col. 2, line 3, that “coins” are accepted, Avnet discloses and suggests nothing more than a conventional vending machine apparatus comprising a coin slot that is not configured to permit substantially simultaneously receiving, in a bulk coin receptacle, randomly oriented bulk coins input by a customer. Likewise, both Smith and Avnet fail to disclose or suggest, for example, an act of “singulating

the bulk coins using a coin separation device.” Similar to claim 258, discussed above, Appellants respectfully submit that Smith and Avnet fail to disclose or suggest, singly or in combination, at least the acts of “receiving bulk coins input by said customer, said act of receiving bulk coins comprising substantially simultaneously receiving, in a bulk coin receptacle, randomly oriented bulk coins input by said customer” or “singulating the bulk coins using a coin separation device” (claims 268-270).

Appellants respectfully submit that the Examiner’s rejection should be reversed for at least the above noted reasons.

## **8. CONCLUSION**

For the reasons set forth above, Appellants respectfully submit that the Examiner’s assertions are legally and factually lacking and fail to present a *prima facie* case of lack of written description under 35 U.S.C. § 112, first paragraph, indefiniteness under 35 U.S.C. § 112, second paragraph, or obviousness under 35 U.S.C. § 103. Based upon the arguments submitted *supra*, Appellants respectfully solicit the Honorable Board to reverse the Examiner’s 35 U.S.C. § 112 rejection of claims 258-261 and 267-270 under 35 U.S.C. § 112, first and second paragraphs, as well as the Examiner’s 35 U.S.C. § 103 rejection of claims 258-261 and 267-270 in view of Smith and Avent, at least upon the grounds noted above.

The Commissioner is hereby authorized to charge deposit account No. 50-4181 (Attorney Docket No. 247171-000373USD1 for the fee of \$510.00 required by 37 C.F.R. §41.20(b)(2) and for any additional fees inadvertently omitted which may be necessary now or during the pendency of this application, except for the issue fee.

Respectfully submitted,

August 19, 2008

Date

/William D. PEGG, Reg. #42,988/

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Attorney for Appellants

**9. APPENDIX OF CLAIMS ON APPEAL**

212-257. (Cancelled)

258. (Previously Presented) A method of redeeming currency from a customer at a self-service machine, comprising:

receiving money input by said customer, said act of receiving money input by said customer comprising substantially simultaneously receiving, in a bulk coin receptacle, randomly oriented bulk coins input by said customer;  
singulating the bulk coins using a coin separation device;  
discriminating between authentic and non-authentic forms of said money including discriminating between valid coins and invalid coins of said bulk coins;  
determining a total value of said authentic forms of said money input by said customer;  
and  
dispensing a card having a storage medium for storing a monetary value that is related to said total value.

259. (Previously Presented) The method of claim 258, wherein said act of receiving money input by said customer further includes the acts of receiving a credit card from said customer, deducting an amount from a line of credit associated with said credit card, and wherein said step of determining said total inputted value further includes adding said amount from said line of credit.

260. (Previously Presented) The method of claim 259, further including receiving instructions from said customer regarding said amount deducted from said line of credit.

261. (Previously Presented) The method of claim 258, wherein said receiving money includes receiving bills from said customer.

262-266. (Cancelled).

267. (Previously Presented) The method of claim 258, wherein said act of receiving money includes simultaneously receiving, in a bulk coin receptacle, randomly oriented bulk coins input by said customer.

268. (Previously Presented) A method of redeeming currency from a customer at a self-service machine, comprising:

receiving bulk coins input by said customer, said act of receiving bulk coins comprising substantially simultaneously receiving, in a bulk coin receptacle, randomly oriented bulk coins input by said customer;  
singulating the bulk coins using a coin separation device;  
discriminating between authentic and non-authentic coins;  
determining a total value of said authentic coins; and  
dispensing a card having a storage medium associated with a monetary value related to said total value of said authentic coins.

269. (Previously Presented) A method of redeeming currency from a customer at a self-service machine according to claim 268, wherein said card has stored on said storage medium a monetary value related to said total value of said authentic coins.

270. (Previously Presented) A method of redeeming currency from a customer at a self-service machine according to claim 268, wherein said card has stored on said storage medium account information related to an account to which said total value of said authentic coins is associated.



**10.     EVIDENCE APPENDIX**

**Exhibit A** - Cummins JetSort® High Speed Coin Sorter/Counter Model 1701 – Product Information Manual (1987) 6 pages.

**11. RELATED PROCEEDINGS APPENDIX**

None.

# Exhibit A

# CUMMINS

## **6,000 coins per minute**

Ten times faster than most other machines, JetSort sorts and counts 6,000 mixed coins per minute. All US coins (except the Eisenhower dollar) are handled simultaneously, including the Susan B Anthony dollar!

## **99.995% Accuracy**

Extreme accuracy complements the exceptional speed. JetSort accuracy exceeds that of virtually all sorters including those operating at one tenth the speed.

## **Proven Reliability**

Used in the most demanding coin processing applications, the patented JetSort design is recognized for outstanding dependability.

## **Unmatched Ease of Use**

JetSort is popular with both operators and supervisors. Operations are straight-forward and easy to learn. Controls and displays are easy to see and use.

## **Models to Meet Your Needs**

Five JetSort Models offer a choice of features such as adjustable bags stops, communications, built-in printers and more. Every JetSort model provides 6,000 coin per minute speed and 99.995% accuracy!



# JetSort®

*High Speed  
Coin Sorter/Counter*

# **Ten Times Faster!**

# JetSort

## Everything you need.

Model 1701 has all the features offered in other JetSort models, and more!

The 1701 enables you to add identification numbers to sub-batches and batches of coin. It also allows you to add the additional values of checks, cash, coupons, etc. to coin totals. For maximum efficiency, data may be keyed simultaneously while coins are being sorted/counted.

The communication capability allows you to transmit all this data to a computer.

## Built-in Printer

The high-speed and silent thermal printer records transactions. It is switch-controlled to save paper. Shown is the printout of a sub-batch of coin with cash and checks values added.



## One RS232 Port

The model 1701 JetSort may be connected to one external device. When connected, JetSort automatically transmits coin totals (including any other data/values added via data entry keyboard) whenever a transaction is completed.

## SUBBATCH REPORT

JETSORT 01	12-31-89	
AUD	00002-0002-001	
B:	444-555-6666	
C:	123456	
COIN	COUNT	AMOUNT
.01	150	1.50
.05	45	2.25
.10	250	25.00
.25	132	33.00
.50	5	2.50
1.0	2	2.00
ST	584	66.25
CURRENCY		274.00
CHECK		125.98
TOTAL		466.23

## Data Entry

You can add data to coin totals generated in the sorting/counting operation.

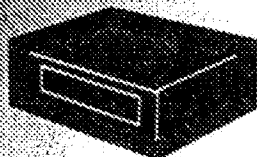
## Up to 3 lines of Identification

Each transaction can be labeled with 0, 1, 2, or 3 identifying numbers (up to 12 digits per number). These numbers identify transactions on printouts. And, they are transmitted with coin totals when the JetSort communicates with an external printer/computer. (Lines "B" & "C" are identifications lines in this sample.)

## Cash/Currency Additions

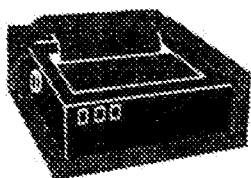
Separate, cumulative values for cash, checks, coupons, etc. can be added to the values of the coins processed. These values are included in sub-batch and batch totals. They appear on printouts and transmit to a computer if used.

# A choice of five models to meet your needs.



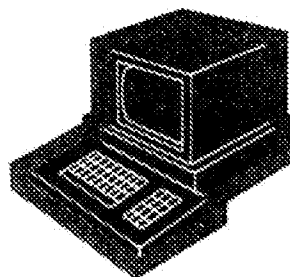
## Remote LED Display

Displays coin totals in large, easy-to-read numbers. Can be located up to 12' from JetSort.



## Your Compatible Printer

To record coin processing sub-totals and totals without errors or omissions.



## Your Compatible Computer\*

To transfer coin processing information directly into your computer—quickly, easily and without errors.

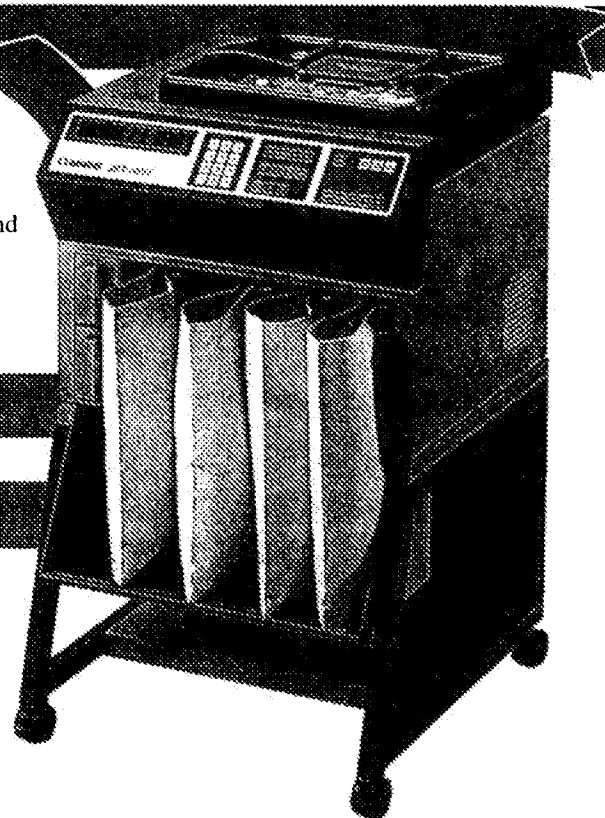
\*To interconnect your computer to JetSort, you must have software which will accept and use the data from JetSort. Cummins-Allison does NOT provide or endorse any specific software for use with JetSort. There are software packages available from CompuVend, EMS and other suppliers, or you can adjust your existing software. Cummins-Allison will provide information on the ASCII data that is transmitted from JetSort. JetSort units cannot be interconnected with other JetSorts.

## Remote Display Port

All models (except 1701) include special port for optional Remote LED Display. Only Sub-Batch and Batch totals are displayed. Only one JetSort may be connected to one display.

## Two RS232 Ports

You can connect JetSort 1770 any one or combination of two external devices. Coin totals (and currency values if added) are transmitted when each transaction is completed. No identification number(s) or other data is transmitted.



- Communications
- Adjustable Bag Stops
- Ability to add currency values

**Model 1770.** Two communications ports enable you to connect this model to any two external devices. Data (including cash values) is automatically transmitted at the end of all sub-batches and batches. Adjustable bag stops can be set to fill bags to any level and they can be changed at any time.

MODEL	6,000 coin/minute Sorting Speed	99.995% Accuracy	All US Coins except "Ike" \$1.00	Battery Protected Memory	Built-in Stand with Casters	Bags: 1, 5, 10 & 25¢ Boxes: 50¢ & SBA \$1	Bag Stops
1701	•	•	•	•	•	•	•
1770	•	•	•	•	•	•*	•
1760	•	•	•	•	•	•*	•
1750	•	•	•	•	•	•*	•
750	•	•	•	•	•	•*	•

\* Special models are available with bag for \$.50 coins.

**JetSort High Speed Sorter/Counters  
are available exclusively through  
50+ Cummins Sales & Service Offices.**



• **Adjustable Bag Stops**

**Model 1760.** From two coins to a full Federal Reserve Bag amount, you can set the bag stop for each denomination independently and change these settings at any time.

• **Bag Stops**

**Model 1750.** All denominations (\$.01—\$.25) are at Full Federal Reserve Bag amounts or ½ Federal Bag amounts (your choice). Sorting stops automatically when pre-set bag/box limits are reached.

• **No Bag Stops**

**Model 750. (Not shown)** When you near Federal Reserve Bag limits, indicators guide you to pace processing of coin until limits are reached.

Adjustable Bag Stops	Remote LED Display Port	RS 232C Port(s)	Currency Entry**	Built-in Printer	Data Entry Keyboard	Lift Tray Coin Feeding Mechanism
•		1	2 lines	•	•	•
•	• #	2	1 line			
•	• #					
	• #					
	• #					

# Optional Remote LED Display may be connected using Special Cable (not RS232).

\*\* On 1701 you can enter two separate amounts. On 1770 one amount can be added. On both units you can enter a series of values and JetSort add total.

***All models use this patented mechanism.***

## ***Only one moving part!***

One moving part, a durable turntable, contacts coins during sorting. In operation, coins are rotated by the turntable against machined guides in the one piece (non moving) sorting head. Each coin is spiraled outward until it exits the sorting head via the precisely milled slot for its denomination.

### **Unsurpassed Accuracy**

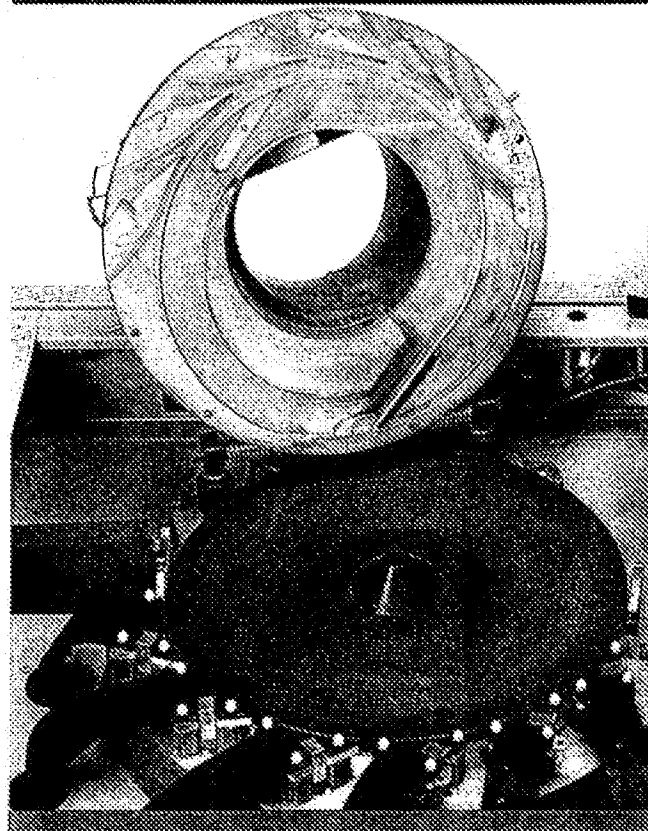
As a coin exits the sorting head, it passes the special metal detector for that denomination. The metal detectors count only metal coins. Better than optical sensors, they never count lint, dirt, etc. as coins.

### **Complete control and tracking.**

JetSort electronics track the coin totals for sub-batch, batch, bag and day totals—simultaneously. And, you can obtain any total on request. Automatic battery back-up protects totals during power losses.

### **Bag Stops**

All JetSort models, except model 750, include bag stops. Several models offer operator/supervisor controlled adjustable bagstops.



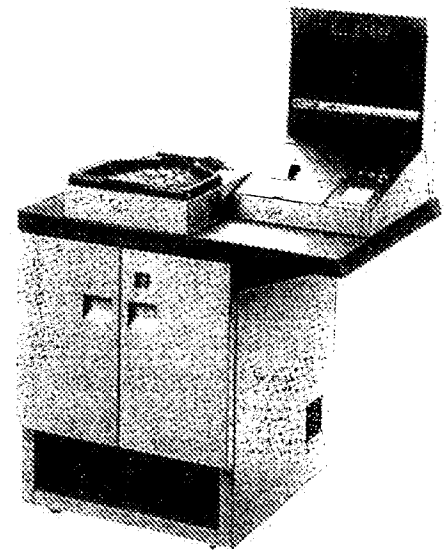
***Designed  
& Built  
in the  
U.S.A.***

Company owned and operated sales &  
service offices in 50 cities.

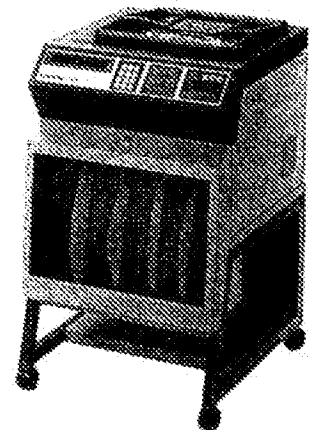


# Jetson®

Display	Internal LED	
Power	120 VAC, 60 Hz, 1500 VA, 15 Amps Dedicated branch circuit required	
RTD's/Hours (Approx.)	3000/114	
Coin(s) Handled	1¢, 5¢, 10¢, 25¢, 50¢, \$1.00, \$2.00	
Coin Collection	Bags for 1¢, 5¢, 10¢, 25¢, 50¢, \$1.00, \$2.00 (Optional Bag Model for 10¢, 25¢, 50¢, \$1.00)	
Sort/Count Speed	6,000 coins/minute - Average Coin Mix	
Options		
Locking Front	Removable Panel Part: 750-0274-01 Not Avail. on 5 bag Units	Locking Door Part: 700-0618-01
Magnet for Thru to Sorter	Part: 750-0100-01 Not Avail. on 5 bag Units	Part: 700-0410-01
Second Built-in Thermal Printer	Not Available	Part: 700-0194-01 File needs to be included tape roll up for audit trail
Remote Display	Display 750-0659-01 Cable 750-0657-01	Not Available
Culling Trays includes table with 1/4" holes for debris, dust/debris tray & hinged tray section	Large Culling Tray - Part 122-0103-01 (42" L x 28" W x 39" H) Small Culling Tray - Part 122-0100-01 (18" L x 18" W x 39" H)	



Shown is Model 1701 with optional locking doors. Part no. 700-0618-01.



Shown is Model 1770 with optional Front Security Panel. Part no. 750-0274-01.

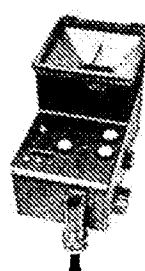
## Other Cummins - Allison Products



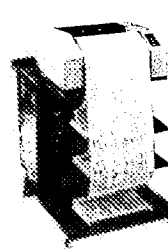
Currency  
Counters



Coin  
Wrappers



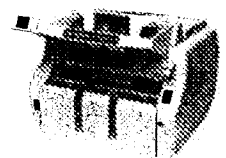
Coin  
Counter/Packagers



Paper  
Shredders



Document Marking  
Perforators



Check Signers  
& Endorsers

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